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SCHOLASTIC HYPERSCREEN™ 2.0 ADDENDUM

Scholastic HyperScreen 2.0, the expanded version of *Scholastic HyperScreen*, includes exciting new features that enhance your presentations and make stack creation easier than ever before:

- New button types offer synthesized speech and scoring.
- New options to sound a bell tone or highlight a button give all buttons enhanced capabilities.
- New browsing features offer increased browsing ease for all users.
- New editing features speed the creation of screens and stacks.

New Button Types

Say Text Button

With the proper speech synthesizer attached, you can create a button that "speaks" any text you enter.

NOTE: Use of this button type requires an Echo™ II, Echo IIb, or Cricket™ speech synthesizer as part of your computer set-up.

To create a Say Text button, follow the instructions below:

1. When choosing a button type, select Say Text from the Button Type menu. (See page 57 of the Reference Guide for more information on choosing a button type.)
2. Enter the text to be spoken in the text box which appears in the same way you enter pop-up text. (See page 64 for further information on entering text for a Pop-up Text button.)
3. If you choose the Visible option, your entered text will be displayed in a window as it is spoken. It will remain on screen until the user clicks a button or presses a key.

NOTE: You may want to choose the Visible option only if the written text you use is spelled correctly—in other words, you haven't used phonetic spelling to achieve correct pronunciation.

When the button is clicked (or activated as part of a Multi-button sequence), the speech synthesizer speaks the text using robotic speech. If the computer is not equipped with a compatible synthesizer, nothing happens.

SPEECH SYNTHESIZER PRONUNCIATION

If you have not previously used a speech synthesizer, experiment with the following methods to improve the sound of the spoken text:

- **Creative Spelling** It may be necessary to use some creative spelling to achieve the right sounds. For example, the synthesizer will pronounce "pilot" as "pillot." Spelling the word as "pielot" corrects the pronunciation.

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- **Phonetics and Echo Commands** A more difficult but accurate method to achieve correct pronunciation is to embed phonetics and additional Echo commands directly in your text. To send phonetic codes, surround them with the curly brackets { and }. For example, {H>!3P<RSCR<&N} causes the synthesizer to say "HyperScreen" quite clearly, much better that it would say the text of the name itself. To send additional Echo commands, surround them with the square brackets [and]. For example, including [40P] in the text raises the pitch of all subsequent speech above its normal level of 22. The Echo Command Reference Charts at the end of this addendum summarize the phoneme codes and the additional Echo commands. For more information and examples, see the manual supplied with your speech synthesizer.

SAY TEXT STACK DISKS

To use the Say Text button, it must be part of a stack located on a special Stack disk created by *HyperScreen* version 2.0 or above. To create a Stack disk with speech capability:

1. Select Create Stack Disk from the APPLE MENU as usual.
2. After the disk is formatted, you will see the prompt "OK to install Echo speech capability? (Uses extra 10K)." Click OK or press Return. The necessary software to create a disk capable of speech will be added to your Stack disk.
3. If you don't plan to use the Say Text button in your stacks, click Cancel or press Esc to save the space that would be taken up by the Echo software.

ADDITIONAL NOTES ON THE SAY TEXT BUTTON

- **Occasional Delays** When using *HyperScreen*, memory limitations sometimes require loading the text-to-speech software before speech can be heard. The program does this automatically when necessary. As the software is automatically loaded, you may notice some hesitation in opening a screen, hearing the speech after creating a Say Text button, or browsing a stack containing Say Text buttons. If you browse from a self-booting Stack disk, however, there will be no extra delays.
- **Using Say Text with Sound/FX Buttons** Because of memory limitations, only one type of button, either Say Text or Sound/FX, but not both, can be contained on an individual screen. Up to 15 Say Text buttons, each with different text, can be included on a single screen.

Score Button

With the Score button, you can accumulate and report a score as your user moves through the stack. The report appears in a pop-up window on your screen. For instance, you could create a stack with a series of questions and provide feedback on how well your users answered. To create a Score button, select this type from the Button Type menu. (See page 57 for further information on this menu.) Then choose the scoring method the button will use. From the Button Info box, select one of four possible Actions:

- **Zero** Activating a Score Zero button sets the score and the number of tries to zero. Use this button type at the beginning of any series of assessment questions.
- **Right** Activating a Score Right button increases both the score and the number of tries by one.

- **Wrong** Activating a Score Wrong button increases the number of tries by one; the score remains the same.
- **Report** Activating a Score Report button pops up a window listing the current values of the score and the number of tries.

One way to use the Score button is to create a screen with multiple choices for the user to select. The Score button can be included as part of a Multi-button list, so that when the user selects a correct answer, the score is increased and the user receives a congratulatory pop-up text message or is linked to another screen. A Score button can also be included in a Multi-button list so that when the user selects an incorrect answer, the score is not increased, the number of tries increases, and the user receives a pop-up hint or is linked to another screen.

Another way to use the Score button is to create a Text Entry button where the correct and incorrect responses link the user to Multi-buttons on the screen. Score buttons can be included in the Multi-button list for the user's correct or incorrect responses, and Pop-up Text and Link to Screen buttons can be created to give appropriate feedback to the user.

Enhanced Button Options

Bell and Hilite Button Options

Two new options have been added for any button, in addition to the original Clickable and Do On Opening options in the Button Info box. (For more information on using the Button Info box, see page 54.)

If you select the Bell option, the computer's bell will sound when the button is clicked. (On an Apple IIGS® computer, the bell is the tone whose pitch and volume you can adjust from the Control Panel.)

If you select the Hilite option, the button area will be highlighted when clicked and the screen colors inside the button rectangle will be reversed (black to white and vice versa, orange to blue and vice versa, etc.). The highlighting will remain on screen until the button is clicked again, restoring the original colors, or until a new screen opens. Use the Hilite option to display the user's button choice as a new screen is loaded or to show which buttons on the screen your user has already chosen.

"Linking to" Buttons

Both the Link to Screen and the Text Entry buttons now offer the option to link to a button on the current screen, instead of linking to a different screen. A list of buttons on the current screen now appears at the end of the Link to Screen menu. (For more information on the Link to Screen menu, see page 58.) To link to a button, choose one of these buttons from the menu. Linking to a button allows greater flexibility in designing your screen. It also saves disk space. For instance, if you had several buttons that performed the same action (such as popping up a hint or speaking the same guiding phrase), you need only create one button now. You can then link all other buttons to the first button. With the Text Entry button, you can now link a no-match result to a Pop-up Text button which provides a hint and lets the user try again. This avoids the need to create an entirely new screen for a hint.

"Do Nothing" Buttons

Instead of displaying a "Button Info incomplete" prompt when clicked, buttons with no button type or incomplete information will now simply do nothing. However, these buttons can be highlighted or ring a bell when clicked. This means you can use "do nothing" buttons to highlight an area of the screen or sound an attention-getting tone without doing anything else.

Video Control Buttons

Video Control buttons can now include a command which stops sending commands to the videodisc player and waits for the user to click a button or press a key before continuing. To insert such a pause in a sequence of video commands, type **WT**. For example, the following Video Control button commands could be used to start the player and display a series of four slides (at video frames 350, 392, 524, and 216), with a key or button press required to advance from each slide to the next one:

```
SA FR350SE WT 392SE
WT 524SE WT 216SE
WT RJ
```

This command is useful in allowing browsers to determine how long to look at a video image before proceeding or in using *HyperScreen* to control video displays during a presentation to an audience. If you use the WT command, you may wish to include a "Click to Continue" message on your screen.

Improved Browsing

New Scanner Features

Three new improvements have been added to enhance the Scanner, allowing students with special needs, and especially physically disabled users, to more easily browse stacks:

- **Multiple Scan Speeds** To adapt to different abilities, you can set the scanner to three different speeds: S (Slow), M (Medium), or F (Fast). On Slow speed, the scanner moves from button to button every 5 seconds; on Medium speed, it moves every 3 seconds; on Fast speed, every second. To set the Scanner speed, select Browse Options from the OPTIONS MENU and make the appropriate choice. To reset the speed while browsing, press Esc and choose a different speed from the Browse Options box that appears. (See page 99 for more information on using the Browse Options box.)
- **Pausing the Scanner** Pressing the space bar now causes the scanning process to pause—stopping button outlining and clicking noises. Press a key or button to begin scanning again. Teachers can use this feature to engage students in other activities temporarily without the distraction of the scanner.
- **Automatic Pause** If the scanner cycles through all the buttons on a screen five times without the user making a selection, the scanner automatically pauses. To restart the scanner, press a key or button.

Keyboard-Only Browsing

When the scanner is not in use, the browser can now move the hand from button to button using the Arrow keys and then press Return to select the button. In version 1.0, this option was available only if no pointing device was attached. Now it is available even with a pointing device attached. Special-needs users who cannot use a pointing device will find this feature especially helpful; users of a pointing device may also find this selection method easier at times.

New Editing Features

Copy Screen

A new item, Copy Screen, can be selected from the FILE MENU. With this item, you can copy the entire contents of any screen in the stack to your current screen—including the screen type, buttons, transition, border, text, graphics, etc. Copy Screen makes it easy to create one screen, for instance the Home Screen, that can be a template for other screens in the stack. You would then copy the Home Screen to another screen and modify it as you chose. If you wish to copy only the graphic image of a screen for use as a background on another screen, select Export Screen Image from the FILE MENU, open the other screen, and then select Graphic Background from the TOOLS MENU to bring in the exported image. (See page 48 for more information about exporting screen images.)

Screen Info

A new item, Screen Info, can be selected from the EDIT MENU. When you select this item, you will see a window of information about your current screen displayed. The information includes the stack name, screen name, screen type, location in the stack, and a list of all the screen buttons with their types and special options. The letters to the right of each completed button indicate whether it is clickable (C), Do-on-opening (D), a Bell (B), or Hilite (H). (See the information on page 3 of this addendum for more information about the new Bell and Hilite options.)

New Button-Editing Features

DOUBLE-CLICKING TO SET A BUTTON'S INFO

When using Set Buttons from the EDIT MENU to place and size buttons, you can now double-click on a button (move the pointer to the button and press the Apple key, mouse, or joystick button two times in succession) to have the Button Info box appear. You can also still click once to select the button and then press Tab or Ctrl-I to call up the Button Info box. (See page 54 for more information about the Button Info box.)

VISIBLE BUTTON NUMBERS

After choosing Set Buttons from the EDIT MENU, the number of each button now appears in the upper-left corner of the outlined button rectangle. Finding and editing specific buttons, especially non-clickable buttons that are part of a Multi-button list, is much easier with this added feature.

Echo Command Reference Charts

The following charts are reprinted by permission from Street Electronics Corp.

Phoneme Codes

REMEMBER: To send phonetic codes, surround them with curly brackets { }.

SAMPLE WORD	DICTIONARY SYMBOL	PHONEME CODE
Vowels		
cat	a	A
lot	o	;
caught	o	*
let	e	E
see	e	&
hid	i	I
book	oo	Q
but	u	U
due	oo	:
about		'
Voiced Consonants		
let	l	L
many	m	M
no	n	N
sing	ng	/
red	r	R
this	*th*	(
very	v	V
wet	w	W
yes	y	Y
zero	z	Z
azure	zh	X
Diphthongs		
cake	a	@
tie	i	!
toe	o	O
pound	ou	#
toil	oi	?
you	u	%
Stop Consonants		
bat	b	B
dog	d	D
get	g	G
kick	k	K
pet	p	P
tie	t	T
check	c h	C
job	j	J

SAMPLE WORD	DICTIONARY SYMBOL	PHONEME CODE
"R" Colored Vowels		
car	ar	;R
chair	ar, er	@R
her	ur, er	'R
hear	er	&R
fire	ir	!R
for	or	OR
tour	oor	QR
hour	our	#R
Unvoiced Fricatives		
fit	f	F
hat	h	H
see	s	S
she	sh	$
think	th	)

Inflection

Stressed - 3	Normal - 2	Reduced - 1	Schwa - 0

Pitch

Rising - >	Flat - =	Falling - <	Pause - ,

A Sample Phoneme Vocabulary

A - @
And - AND
Answer - A3NS'R
Apple - A3P'L

B - B&
Byte - B!3T

C - S&
Catalog - KA3DIL*G
Correct - KORE3KT

D - D&
Decimal - DE3SIM'L
Divide - DI1V!3D

E - &
Equals - &3KW'LS
Exclamation - EKSKL'M@3SHUN

F - EF
First - F'RST

G - J&
Good - GQ3D

H - 'C
Hello - HELO1
HyperScreen - H!3P'RSCR&N

I - !3
Incorrect - INKORE3KT

J - J@

K - K@
Keyboard - K&3BORD

L - EL

M - EM
Memory - MEM'R&1

N - EN
No - NO
Number - NUMB'R

O - O3
Off - *F
On - *N
Open - OP'N

P - P&
Program - PRO3GRAM

Q - K%3
Question - KWESC'N

R - ;R3
Return - R&T'R3N

S - ES
Sorry - S;R3&
Spell - SPEL

T - T&
That - (AT
The - (&3
Thousand -)#3ZS'ND

U - %3
Understand - UND'RSTA3ND

V - V&

W - DUBI%1
Where - W@R3
Wrong - R*/

X - EKS

Y - W!3
Yes - YES

Z - SZ&

Additional Commands

REMEMBER: To send Echo commands, surround them with square brackets [ ].

PITCH (n=1 to 63)	
Flat	[nF]
Intonation	[nP]
VOLUME (n=0 to 15)	[nV]
RATE	
Compressed (Fast)	[C]
Expanded (Slow)	[E]
PRONUNCIATION	
Words	[W]
Letter-by-Letter	[L]
PUNCTUATION	
Some (#$%&+/<=>@)	[S]
Most	[M]
All (LF, CR, SPACE)	[A]
DELAY (n=0 to 15)	[nD]

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